

Milestones in U.S. Farming and Farm Policy

Carolyn Dimitri, cdimitri@ers.usda.gov Anne Effland, aeffland@ers.usda.gov

U.S. agriculture underwent a tremendous transformation during the 20th century—the structure of farming and rural life today barely resembles that of the early 1900s. A comparison of six basic agricultural indicators across the century reveals a dramatic transformation of the U.S. agricultural sector. Snapshots of five points in time—1900, as the century opened; 1930, as the Depression began; 1945, as World War II ended; 1970, as the post-war economic expansion began to wane; and 2000/02, on the brink of a new century—serve to highlight key milestones of change in U.S. farming and farm policy during the 20th century.

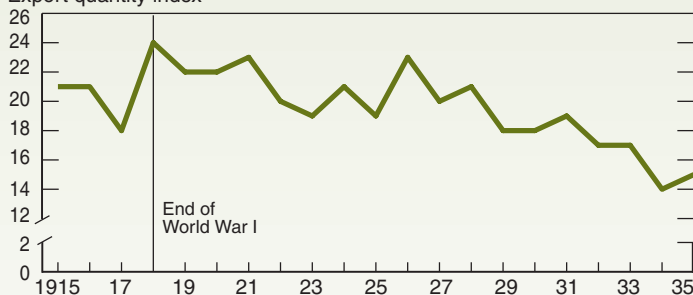


Integration of farming into the wider economy, 1900–30

New farming technologies and growing demand for consumer goods drew agriculture and farm households into a more integrated relationship with the general economy. Farm household use of purchased farm inputs and household goods, such as cars and radios, often required increased use of credit, and market-determined commodity costs and prices became more critical to farm profitability and farm household well-being. Agricultural producers received high prices through most of this period, due to domestic demand fueled by an increasingly urban population and by export demand spurred by World War I. A sharp drop in export demand following the war triggered a price collapse in 1920–21 that continued through the decade and led to widespread farm bankruptcies and an economic crisis in the agricultural sector. In response, political efforts began in the 1920s to secure government policies to improve access to credit and to support agricultural prices that would enhance farm incomes.

Farm exports begin to fall as wartime demand disappears with World War I's end

Export quantity index

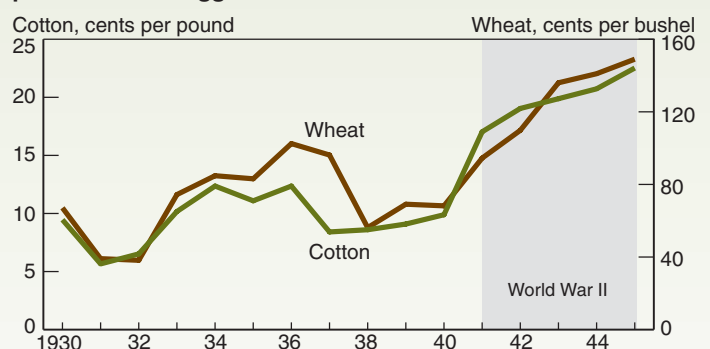


Note: Standard techniques were used to splice together four series using different base years; final base year is 1967. Data not available before 1915.
Source: Export quantity index, *Agricultural Statistics*, USDA, various issues.

National crises and the foundations of Federal farm policy, 1930–45

Economic distress in the agricultural sector in the 1920s was followed by the Great Depression in the 1930s, leading to unprecedented government intervention (via the New Deal) in the form of emergency programs for both the industrial and the agricultural sectors. The Agricultural Adjustment Act of 1933, effectively the first farm bill, launched the New Deal's emergency farm programs. The act's goals were to raise prices for farm products and protect the equity of farmers in debt. Relief and structural adjustment programs addressed the problems of marginal farms and rural poverty. The Soil Conservation and Domestic Allotment Act of 1936 reflected a new interest in soil conservation, simultaneously establishing programs to improve farm incomes and protect soil resources. Renewed demand generated by World War II improved farm prices by 1945, and U.S. agriculture entered a sustained period of productivity gains.

The New Deal helps boost farm prices, but World War II proves to be a bigger stimulus



Source: *Agricultural Statistics*, USDA, 1946.

100 years of structural change in U.S. agriculture

| | 1900 | 1930 | 1945 | 1970 | 2000/02 |
|---|------|----------|-----------|---------|---------|
| Number of farms (millions) | 5.7 | 6.3 | 5.9 | 2.9 | 2.1 |
| Average farm size (acres) | 146 | 151 | 195 | 376 | 441 |
| Average number of commodities produced per farm | 5.1 | 4.5 | 4.6 | 2.7 | 1.3 |
| Farm share of population (percent) | 39 | 25 | 17 | 5 | 1 |
| Rural share of population (percent) | 60 | 44 | 36 (1950) | 26 | 21 |
| | | | | Percent | |
| Off-farm labor* | na | 100 days | 27 | 54 | 93 |

na=not available.

*1930, average number of days worked off-farm; 1945, percent of farmers working off-farm; 1970 and 2000/02, percent of households with off-farm income.

Sources: U.S. Census Bureau, Census of Agriculture, and Census of Population, various issues, 1900-2000; USDA Census of Agriculture, 2002; and B.



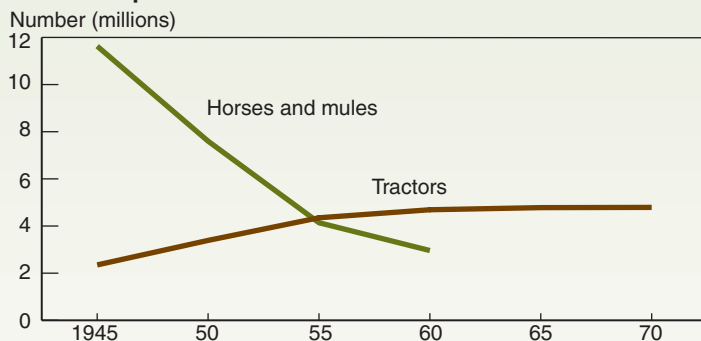
This article is drawn from ...

The 20th Century Transformation of U.S. Agriculture and Farm Policy, by Anne Effland and Carolyn Dimitri, EIB-3, USDA, Economic Research Service, June 2005, available at: www.ers.usda.gov/publications/eib3/

Structural transformation of the farm sector, 1945–70

By 1970, animal power on farms had given way to tractors and other machinery for farm production processes. Advances in productivity through mechanization, plant and animal breeding developments, and new chemical fertilizers and pesticides led to fewer, larger, more specialized farms and a massive migration out of farming. Farm families increasingly sought income and opportunities from off-farm work, facilitated by a diversifying rural economy. Productivity increases led to commodity surpluses in government warehouses, the result of loan programs that allowed farmers to forfeit commodities in lieu of repayment when prices fell. Commodity policies were adjusted to reduce buildup of surpluses, while new policy approaches, such as food assistance and the soil bank programs, sought to increase demand and reduce supply in ways that simultaneously addressed such concerns as poverty and soil conservation.

Tractors replace work animals on farms

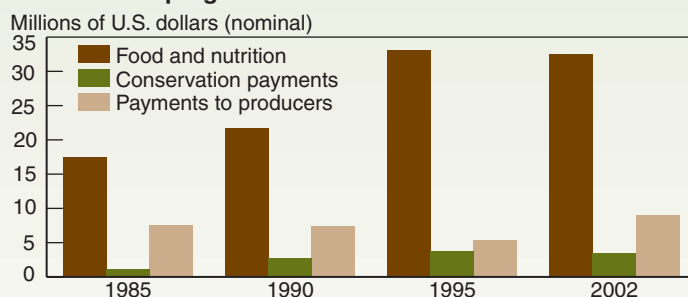


Note: Work animals were not enumerated after the 1960 Census.
Sources: U.S. Census Bureau, Census of Agriculture, various issues, and *Agricultural Statistics*, USDA, various issues.

Globalization and new stakeholders in agriculture, 1970–2000/02

Over the last three decades, agriculture worldwide became increasingly integrated. While exports continued to account for 20-30 percent of U.S. farm income, U.S. farmers faced new challenges, including the emergence of new foreign competitors and trade tensions over new technologies and food safety assurances. At home, new stakeholders joined the farm policy debate, as consumers became increasingly concerned about food safety, nutrition, food variety and quality, and food prices, and environmental interests worked to bring environmentally friendly production methods to agriculture. The food industry responded with increased use of contracting and supply chain coordination to ensure supply and quality control. Government expenditures on food and nutrition programs and natural resource conservation increased, and commodity policy shifted toward greater market orientation, with the 1990 farm bill giving growers greater planting flexibility and the 1996 farm bill basing payments on historical production rather than current output.

Government payments shift toward food, nutrition, and conservation programs



Sources: *Agricultural Statistics*, USDA, various issues; ERS Briefing Room on Farm Income, available at: www.ers.usda.gov/data/farmincome/finfidm.htm; *Agricultural Resources and Environmental Indicators*, AH-722, USDA, Economic Research Service, February 2003, available at: www.ers.usda.gov/publications/arei/ah722/arei6_1/table6_1_2.xls